

***What is claimed is:***

1. A method of improving pathogen resistance or tolerance in a plant and its descendant plants comprising integrating into the genome of said plant a gene encoding a fusion protein comprising

  - (a) a first protein or protein domain with anti-pathogenic activity;
  - (b) a linker peptide; and
  - (c) a second protein or protein domain with anti-pathogenic activity.

2. The method according to claim 1, wherein further proteins or protein domains with anti-pathogenic activity are fused to the fusion protein by linker peptides.

3. The method according to claim 1, wherein at least one of the proteins or protein domains with anti-pathogenic activity has proteinase inhibitor activity.

4. The method according to claim 3, wherein at least one of the proteins or protein domains with anti-pathogenic activity is the proteinase inhibitor Oc-IΔD86.

5. The method according to claim 4, wherein at least one of the proteins or protein domains with anti-pathogenic activity is the proteinase inhibitor CpTI.

6. The method according to claim 1, wherein the gene is functionally linked to a promoter sequence driving expression preferentially in plant roots.

7. The method according to claim 1, wherein the linker peptide comprises an amino acid sequence which is proteolytically cleaved by the plant.

8. The method according to claim 1, wherein the linker peptide comprises an amino acid sequence which is proteolytically stable in the plant.

9. The method according to claim 1, wherein the linker peptide is characterized by comprising the amino acid sequence QASSYTAPQPQ.

10. The method according to claim 7, wherein the linker peptide is characterized by comprising the amino acid sequence VILGVGPAKIQFEG.

11. The method according to claim 7, wherein the linker peptide is characterized by comprising the amino acid sequence QASIEGRYTAPQPQ.

12. The method according to claim 13 improving nematode resistance or tolerance.
13. A DNA molecule capable of encoding a fusion protein comprising  
(a) a first protein or protein domain with anti-pathogenic activity;  
(b) a linker peptide; and  
(c) a second protein or protein domain with anti-pathogenic activity.
14. The DNA molecule according to claim 13 wherein the encoded fusion protein comprises further proteins or protein domains with anti-pathogenic activity fused thereto by linker peptides.
15. The fusion protein encoded by the DNA molecule according to claims 13.
16. A plant expressing the fusion protein encoded by the DNA molecule according to claim 13.
17. Use of the DNA molecule according to claim 13 to improve pathogen resistance or tolerance of a plant and its descendant plants.

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